



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/908,963	07/19/2001	Itshak Bergel	INTL-0603-US (P11744)	1926

21906 7590 09/10/2003

TROP PRUNER & HU, PC
8554 KATY FREEWAY
SUITE 100
HOUSTON, TX 77024

EXAMINER

SMITH, SHEILA B

ART UNIT	PAPER NUMBER
----------	--------------

2681

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**UNITED STATES DEPARTMENT OF COMMERCE****U.S. Patent and Trademark Office**

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
---------------------------------	-------------	---	---------------------

EXAMINER

ART UNIT	PAPER
----------	-------

5

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Office Action Summary

Application No.

09/908,963

Applicant(s)

BERGEL, ITSHAK

Examiner

Sheila B. Smith

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-30 is/are allowed.
- 6) ☒ Claim(s) 1-4,6,10-13,15,16 and 22-26 is/are rejected.
- 7) ☐ Claim(s) 5,7-9,14,17-21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-4,9,12,16 rejected under 35 U.S.C. 102(e) as being anticipated by Komatsu (U.S. Patent Publication 2001/0046873).

Regarding claims 1-4,9,12,16; Komatsu discloses all the claimed invention as set fourth in the instant application, also Komatsu discloses a Mobile terminal for transmission diversity CDMA communication system, in addition Komatsu discloses a determining for a channel, channel prediction terms from both first channel estimation terms derived from first common pilot channel signal and second channel estimation terms derived from second common pilot channel signal (which reads on paragraphs 0018-0021); and enabling control over future transmission patterns of the channel using the channel prediction terms (which reads on paragraphs 0022) and exhibited in figure 3.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 6,10-13,15,22-26, rejected under 35 U.S.C. 103(a) as being unpatentable over Komatsu in view of (WO 00/72464).

Regarding claims 6,10,11,13, Komatsu discloses everything claimed, as applied above (see claims 1) however, Komatsu fails to specifically disclose adaptively calculating includes receiving one or more weighted values associated with one or more antennas of a plurality of antennas.

In the same field of endeavor, (WO 00/72464) discloses a transmit diversity method and system. In addition (WO 00/72464) discloses the use of receiving one or more weighted values associated with one or more antennas of a plurality of antennas (which reads on page 18 lines 6-17).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to improve Komatsu by modifying a Mobile terminal for transmission diversity CDMA communication system with the use of adaptively calculating includes receiving one or more weighted values associated with one or more antennas of a plurality of antennas, as taught by (WO 00/72464) for the purpose of saving on waste of transmit power.

Regarding claims 15,16, Komatsu discloses everything claimed, as applied above (see claims 1) additionally Komatsu, discloses a communication interface (9); and a processor (20) communicatively coupled to the communication interface (9), channel prediction terms from both first channel estimation terms derived from first common pilot channel signal and second channel estimation terms derived from second common pilot channel signal (which reads on paragraphs 0018-0021); and enabling control over future transmission patterns of the channel using the channel prediction terms (which reads on paragraphs 0022) and exhibited in figure 3.

Regarding claims 22-24, they disclose an apparatus corresponding to the method of claims 1-4. The apparatus is inherent in that it simply provides structure for the logical implementation found in claims 1-4.

Regarding claims 25,26, Komatsu discloses everything claimed, as applied above (see claims 1) however, Komatsu fails to specifically disclose provide feedback having the at least one weighted value of the one or more weighted values to the first and second antennas of the plurality of antennas.

In the same field of endeavor, (WO 00/72464) discloses a transmit diversity method and system. In addition (WO 00/72464) discloses the use of provide feedback having the at least one weighted value of the one or more weighted values to the first and second antennas of the plurality of antennas (which reads on page 19 lines 6-17).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to improve Komatsu by modifying a Mobile terminal for transmission diversity CDMA communication system with the use of adaptively calculating includes

Art Unit: 2681

receiving one or more weighted values associated with provide feedback having the at least one weighted value of the one or more weighted values to the first and second antennas of the plurality of antennas, as taught by (WO 00/72464) for the purpose of saving on waste of transmit power.

Allowable Subject Matter

3. Claims 5,7-8,14,17-21, objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. Claims 27-30 are allowed.

Response to Arguments

5. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

Applicants arguments regarding claim 1, that Komatsu fails to teach determining channel prediction terms from different channel estimation terms derived corresponding common pilot channel signals, the examiner contends that the art of record does teach determining channel prediction terms [which reads on 0027] a downward link estimation unit for estimating the downward channel on the basis of the received downward signal; different channel estimation terms derived corresponding common pilot channel signals [which reads on 0028] an upward link estimation unit for estimating the upward channel on the basis of the received downward signal from different channel estimation terms derived corresponding common pilot channel signals the base station of a communication link. The examiner further contends that the upward link and the downward link signals reads on a common pilot channel signals. The

Art Unit: 2681

examiner contends that the art of record more than adequately meets the limitations of this claim, the examiner refers the applicant back to the previous rejection.

Applicants arguments regarding claim 15 that Komatsu fails to teach, discloses a communication interface (9); and a processor (20)(which reads on the demodulator that processes the signal to demodulate it) communicatively coupled to the communication interface (9), channel prediction terms from both first channel estimation terms derived from first common pilot channel signal and second channel estimation terms derived from second common pilot channel signal (which reads on paragraphs 0018-0021); and enabling control over future transmission patterns of the channel using the channel prediction terms (which reads on paragraphs 0022) and exhibited in figure 1. The examiner contends that the art of record more than adequately meets the limitations of this claim, the examiner refers the applicant back to the previous rejection.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2681

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheila B. Smith whose telephone number is (703)305-0104. The examiner can normally be reached on Monday-Thursday 6:00 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 703-305-4040. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-0104.

S. Smith
September 8, 2003


SINH TRAN
PRIMARY EXAMINER